

IFW16

RAW SEQUENCE LISTING

DATE: 08/26/2004

PATENT APPLICATION: US/09/463,733

TIME: 11:39:12

Input Set : A:\Uc-851-1.app

Output Set: N:\CRF4\08262004\I463733.raw

3 <110> APPLICANT: Zuker, Charles Vinos, Javier The Regents of the University of California 7 <120> TITLE OF INVENTION: Method for Modulating G-Protein Coupled Receptors 9 <130> FILE REFERENCE: 02307E-085110US 11 <140> CURRENT APPLICATION NUMBER: US 09/463,733 C--> 12 <141> CURRENT FILING DATE: 2000-01-26 14 <150> PRIOR APPLICATION NUMBER: US 60/054,165 15 <151> PRIOR FILING DATE: 1997-07-30 17 <150> PRIOR APPLICATION NUMBER: US 60/054,492 18 <151> PRIOR FILING DATE: 1997-08-01 20 <150> PRIOR APPLICATION NUMBER: WO PCT/US98/15717 21 <151> PRIOR FILING DATE: 1998-07-29 23 <160> NUMBER OF SEQ ID NOS: 1 25 <170> SOFTWARE: PatentIn Ver. 2.1 The state of the s 27 <210> SEQ ID NO: 1 28 <211> LENGTH: 661 29 <212> TYPE: PRT 30 <213> ORGANISM: Drosophila melanogaster 32 <220> FEATURE: 33 <223> OTHER INFORMATION: retinal degeneration C (RDGC) protein 35 <400> SEQUENCE: 1 36 Met Asp Glu Asn Ala Ile Arq Ala Ala Ile Phe Ile Gln Lys Trp Tyr 39 Arg Arg His Gln Ala Arg Arg Glu Met Gln Arg Arg Cys Asn Trp Gln 20 25 42 Ile Phe Gln Asn Leu Glu Tyr Ala Ser Glu Gln Asp Gln Ala Glu Leu 35 45 Tyr Lys Phe Phe Asn Asp Leu Ile Lys His Met Pro Gln Ala Ala Gly 50 55 48 Arg Lys Asn Gln Tyr Gln Gly Ser Ala His Val Ser Val Leu Asp Asp 70 51 Lys Asp Asp Leu Val Glu Glu Phe Gly Asp Ile Val Asn Ala Lys Ile 90 54 Glu Leu Pro Ile Arg Lys Asn His Ile Asp Leu Leu Ile Asp Val Phe 105 55 100 57 Arg Lys Lys Arg Gly Asn Arg Leu His Pro Lys Tyr Val Ala Leu Ile 120 125 60 Leu Arg Glu Ala Ala Lys Ser Leu Lys Gln Leu Pro Asn Ile Ser Pro 130 135 140 63 Val Ser Thr Ala Val Ser Gln Gln Val Thr Val Cys Gly Asp Leu His 150 155

66 Gly Lys Leu Asp Asp Leu Leu Val Val Leu His Lys Asn Gly Leu Pro

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		165					170					175	*
67 69 Ser Ser			Tur V	Ja l	Dhe	Δen		Δsn	Phe	Val	Asp		Glv
70	180		- y -	v ca.s.		185	Ory	1101	1110		190	5	J = 1
72 Lys Arg			(a) 1	.e11			T. 2 11	T. - 211	Ser	Len		Len	Δla
	195	Giu	val 1		200	шси	ыса	пси	DCI	205	- 1 -	ДСС	1114
75 Phe Pro		บาไป	Dho I			λra	Clv	Λcn	uic		λen	Sar	Val
	ASII AIA	vari		215	ASII	Arg	Gry		220	Giu	лэр	DCI	vai
76 210 78 Met Asn	71 - 7×~	Ture (Tlo	λνα	Clu			Car	Lare	Tur	Pro
	Ala Aly	_	31y 1	rne	116	ALG	GIU	235	GIU	SET	цуъ	ıyı	240
79 225	IIia T				7 T	Dho	т1.		C1	u-1	Пт. гэх	λκα	
81 Arg Asn	нта туа	_	тте 1	Leu .	Ата	Pne		Asp	GIU	val	тут		тър
82		245			7	0	250	TT - 3	T	T1 -		255	al
84 Leu Pro			val 1	Leu			arg	vai	ьeu	rre		HIS	GTÅ
85	260		m1 d	a .		265	*	T 1 -	T	a	270	7	7
87 Gly Phe		Ser :	rnr s			Asp	ьeu	тте	ьуs		шe	Asp	Arg
	275				280	_	_	_	1	285	~1	~7	_
90 Gly Lys	Tyr Val	Ser :			Arg	Pro	Pro			Asp	GLY	GIU	Pro
91 290		_		295		_			300		_	_	_
93 Leu Asp	Lys Thr			Gln	Gln	Ile			Ile	Met	Trp	Ser	
94 305			310			7		315					320
96 Pro Gln	Ala Thr		Gly (Cys	Val	Pro		Thr	Leu	Arg	Gly		Gly
9 7		325					330					335	
99 Val Trp	Phe Gly	Pro A	Asp V	Val	Thr	Asp	Asn	Phe	Leu	Gln			Arg
100	34					345					350		
102 Leu Ser	Tyr Va	l Ile	Arg	Ser	His	Glu	ı Cys	Lys	Pro			His	Glu
103	355				360					365			
105 Phe Met	His As	p Asn	Lys	Ile	Ile	Thr	Ile	Phe	Ser	Ala	Ser	Asn	Tyr
106 370			_	375					380)			
			_	375					380)			
106 370			_	375					380 Arg)			
106 370 108 Tyr Ala	Ile Gl	y Ser	Asn 390	375 Lys	Gly	Ala	ı Tyr	Ile 395	380 Arg	Leu	ı Asn	ı Asn	Gln 400
106 370 108 Tyr Ala 109 385	Ile Gl	y Ser	Asn 390	375 Lys	Gly	Ala	ı Tyr	Ile 395 Ala	380 Arg	Leu	ı Asn	ı Asn	Gln 400 Lys
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106 370 108 Tyr Ala 109 385 111 Leu Met 112	Ile Gl Pro Hi	y Ser s Phe 405 e Lys	Asn 390 Val	375 Lys Gln	Gly Tyr	Ala	Tyr Ser 410	Ile 395 Ala	380 Arg	Leu Ser	Asn Glr	Asn Thr 415	Gln 400 Lys
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106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115	Ile Gl Pro Hi Ser Ph	y Ser s Phe 405 e Lys	Asn 390 Val Gln	375 Lys Gln Arg	Gly Tyr Met	Ala Ile Gly 425	Tyr Ser 410 11e	Ile 395 Ala Val	380 Arg Ala Glu	Leu Ser Ser	Asn Glr Ser 430	Thr 415 Ala	Gln 400 Lys Leu
106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118	Ile Gl Pro Hi Ser Ph 42 Leu Al 435	y Ser s Phe 405 e Lys 0 a Val	Asn 390 Val Gln Arg	375 Lys Gln Arg Met	Gly Tyr Met Arg	Ala Ile Gly 425	Tyr Ser 410 Tle His	Ile 395 Ala Val	380 Arg Ala Glu Asp	Leu Ser Ser Glu 445	Asn Gln Ser 430 Leu	Thr 415 Ala	Gln 400 Lys Leu Asp
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106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118 120 Glu Phe 121 450	Pro Hi Ser Ph 42 Leu Al 435 Arg Ly	y Ser s Phe 405 e Lys o a Val s Tyr	Asn 390 Val Gln Arg	375 Lys Gln Arg Met Pro	Gly Tyr Met Arg 440 Lys	Ala Ile Gly 425 J Asp	Tyr Ser 410 Ile His	Ile 395 Ala Val Arg	380 Arg Ala Glu Asp Tyr 460	Leu Ser Ser Glu 445	Glr Ser 430 Leu	Asn Thr 415 Ala Glu	Gln 400 Lys Leu Asp
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106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118 120 Glu Phe 121 450 123 His Trp 124 465	Pro Hi Ser Ph 42 Leu Al 435 Arg Ly Cys Ly	y Ser s Phe 405 e Lys o a Val s Tyr	Asn 390 Val Gln Arg Asp Met 470	375 Lys Gln Arg Met Pro 455 Glu	Gly Tyr Met Arg 440 Lys Asn	Ala Ile Gly 425 Asp Asp	Tyr e Ser 410 ille ille ille ille ille ille ille ill	Ile 395 Ala Val Arg Gly Lys 475	Ala Glu Asp Tyr 460 Leu	Ser Ser Glu 445	Asn Glr Ser 430 Leu Ser Leu	Thr 415 Ala Glu Ile	Gln 400 Lys Leu Asp Ser Trp 480
106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118 120 Glu Phe 121 450 123 His Trp 124 465 126 Arg Leu	Pro Hi Ser Ph 42 Leu Al 435 Arg Ly Cys Ly	y Ser s Phe 405 e Lys o a Val s Tyr	Asn 390 Val Gln Arg Asp Met 470	375 Lys Gln Arg Met Pro 455 Glu	Gly Tyr Met Arg 440 Lys Asn	Ala Ile Gly 425 Asp Asp	Tyr e Ser 410 ille ille ille ille ille ille ille ill	Ile 395 Ala Val Arg Gly Lys 475	Ala Glu Asp Tyr 460 Leu	Ser Ser Glu 445	Asn Glr Ser 430 Leu Ser Leu	Thr 415 Ala Glu Ile	Gln 400 Lys Leu Asp Ser Trp 480 Val
106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118 120 Glu Phe 121 450 123 His Trp 124 465 126 Arg Leu 127	Pro Hi Ser Ph 42 Leu Al 435 Arg Ly Cys Ly Leu Ar	y Ser s Phe 405 e Lys 0 a Val s Tyr s Val g Asp 485	Asn 390 Val Gln Arg Asp Met 470 Lys	375 Lys Gln Arg Met Pro 455 Glu Leu	Gly Tyr Met Arg 440 Lys Asn Ala	Ala Ile Gly 425 Asp Asp Val	Tyr Ser 410 His Ser Thr Gly 490	Ile 395 Ala Val Arg Gly Lys 475	Ala Glu Asp Tyr 460 Leu Asp	Ser Ser Glu 445 Tle Gly Ser Gly Ser	Asn Glr Ser 430 Leu Ser Leu Glr	Asn Thr 415 Ala Glu Ile Pro	Gln 400 Lys Leu Asp Ser Trp 480 Val
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106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118 120 Glu Phe 121 450 123 His Trp 124 465 126 Arg Leu 127 129 Asn Tyr 130 132 Ala Glu 133 135 Ala Ser	Pro Hi Ser Ph 42 Leu Al 435 Arg Ly Cys Ly Leu Ar Asn Ar 50 Ala As 515 Leu Va	y Ser s Phe 405 e Lys 0 a Val s Tyr s Val g Asp 485 g Thr 0 p Gly	Asn 390 Val Gln Arg Asp Met 470 Lys Leu Met	375 Lys Gln Arg Met Pro 455 Glu Leu Asp Ser Phe	Gly Tyr Met Arg 440 Lys Asn Ala Leu Val 520 Asn	Ala Gly 425 Asp Val Pro	E Ser 410 His Ser Thr Gly 490 Asp	Ile 395 Ala Val Arg Gly Lys 475 Thr	Asp Asp Asp Asp Asp Asp Asp Asp	Serical Serica	Asn Glr Ser 430 Leu Ser Leu Glr Ile 510 Ala	Asn Ala Glu Ile Pro Lys 495 Leu	Gln 400 Lys Leu Asp Ser Val Glu Lys
106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118 120 Glu Phe 121 450 123 His Trp 124 465 126 Arg Leu 127 129 Asn Tyr 130 132 Ala Glu 133 135 Ala Ser 136 530	Pro Hi Ser Ph 42 Leu Al 435 Arg Ly Cys Ly Leu Ar Asn Ar 50 Ala As 515 Leu Va	y Ser s Phe 405 e Lys 0 a Val s Tyr s Val g Asp 485 g Thr 0 p Gly l Ala	Asn 390 Val Gln Arg Asp Met 470 Lys Leu Met	375 Lys Gln Arg Met Pro 455 Glu Leu Asp Ser Phe 535	Gly Tyr Met Arg 440 Lys Asn Ala Leu Val 520 Asn	Ala Gly 425 Asp Val Pro Leu 505 Met	Tyr Ser 410 His Ser Thr A90 Asp	Ile 395 Ala Val Arg Gly Lys 475 Thr Ala	Asp Asp Asp Asp Asp Asp Asp Asp Asp	Ser Ser Glu 445 Ile Gly Ser Val	Asn Glr Ser 430 Leu Ser Leu Glr File 510 Asn	Asn Ala Ala Glu Ile Pro Ala 495 Leu Asn Ser	Gln 400 Lys Leu Asp Ser Trp 480 Val Glu Lys
106 370 108 Tyr Ala 109 385 111 Leu Met 112 114 Arg Leu 115 117 Lys Glu 118 120 Glu Phe 121 450 123 His Trp 124 465 126 Arg Leu 127 129 Asn Tyr 130 132 Ala Glu 133 135 Ala Ser	Pro Hi Ser Ph 42 Leu Al 435 Arg Ly Cys Ly Leu Ar Asn Ar 50 Ala As 515 Leu Va	y Ser s Phe 405 e Lys 0 a Val s Tyr s Val g Asp 485 g Thr 0 p Gly l Ala	Asn 390 Val Gln Arg Asp Met 470 Lys Leu Met	375 Lys Gln Arg Met Pro 455 Glu Leu Asp Ser Phe 535	Gly Tyr Met Arg 440 Lys Asn Ala Leu Val 520 Asn	Ala Gly 425 Asp Val Pro Leu 505 Met	Tyr Ser 410 His Ser Thr A90 Asp	Ile 395 Ala Val Arg Gly Lys 475 Thr Ala	Asp Asp Asp Asp Asp Asp Asp Asp Asp	Ser Ser Glu 445 Ile Gly Ser Val	Asn Glr Ser 430 Leu Ser Leu Glr File 510 Asn	Asn Ala Ala Glu Ile Pro Ala 495 Leu Asn Ser	Gln 400 Lys Leu Asp Ser Trp 480 Val Glu Lys

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147	Glu	Ala	Phe	Arg	Leu	Ser	Asp	Leu	His	Arg	Lys	Glu	Gln	Gln	Asp	Glu
148			595					600		-			605			
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151		610					615					620				
153	Thr	Asp	Pro	Val	Thr	Leu	Leu	Ala	Asp	Lys	Ile	Ser	Lys	Asn	Thr	Leu
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157					645					650					655	
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VERIFICATION SUMMARY

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Input Set : A:\Uc-851-1.app

Output Set: N:\CRF4\08262004\I463733.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date